


Annual Landfill Underdrain Monitoring Summary (ALUMS) Report				
		1] DEQ Region: NRO		
		2] DEQ Regional Contact: Yurek Aurelson		
		3] Submittal Date: 11/1/2016		
4] Permit Number: SWP123		5] Landfill Name: XYZ Landfill		
6] GW Program Status: Assessment		7] Landfill Operational Status: Active		
8] Underdrain Details: 8-a] Type of Underdrain: Drain System 8-b] Sampled Media: Groundwater 8-c] Description of Discharge: to surface water				
9] Monitoring Frequency: Semi-Annually		10] Is Sampled Discharge Covered by VPDES: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
11] # of Monitoring Points Sampled: 2		12] # of Upgradient Monitoring Points Sampled: 1		
Sampling Specifics				
13] Date Samples were collected?	E1: 2/2/2016	E2: 4/6/2016	E3: 6/8/2016	E4: 9/14/2016
14] Were any monitoring points unable to be sampled?				<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
For monitoring points not sampled during the sampling event; provide the reason below and note whether this was a first time occurrence, or whether it has been observed on site before at that particular location.				
14-a] Damage (Initial occurrence? <input type="checkbox"/>)				<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
14-b] Failure to yield sufficient sampling volume (Initial occurrence? <input type="checkbox"/>)				<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
14-c] Totally Dry, could not be sampled (Initial occurrence? <input type="checkbox"/>)				<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
14-d] Other, please explain:				
15] Were sampling parameters measured in field? If yes, include data in Attachment VI				<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Analytical Lab Information				
16] Dates samples were sent to analytical lab:	E1: 2/9/2016	E2: 4/13/2016	E3: 6/15/2016	E4: 9/21/2016
17] Were samples submitted under Chain of Custody?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
18] Dates samples were received at analytical lab:	E1: Click here to enter a date.	E2: Click here to enter a date.	E3: Click here to enter a date.	E4: Click here to enter a date.
19] Were samples submitted to a VELAP accredited facility?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
20] Were samples analyzed using SW-846 (as updated) methods?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
21] Date signed/certified analytical report issued by lab:	E1: Click here to enter a date.	E2: Click here to enter a date.	E3: Click here to enter a date.	E4: Click here to enter a date.
22] Date signed/certified analytical reports received by consultant/facility:	E1: Click here to enter a date.	E2: Click here to enter a date.	E3: Click here to enter a date.	E4: Click here to enter a date.

Interpretation and Response to Analytical Results				
23] For groundwater sampled, do any constituents exceed background levels determined at the upgradient monitoring well(s) on site?				<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
24] For surface water sampled, do any constituents exceed background?				<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
25] For sampling lists that contain VOC, were any VOCs identified above their LOQ?				<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
(if yes) 25-a] Were any of the detections for new VOC constituents or sample points?				<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
26] Was verification sampling undertaken?				<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
(if yes) 26-a] Dates of the verification event?	E1: Click here to enter a date.	E2: Click here to enter a date.	E3: Click here to enter a date.	E4: Click here to enter a date.
(if yes) 26-b] Dates verification results were released by the analytical lab?	E1: Click here to enter a date.	E2: Click here to enter a date.	E3: Click here to enter a date.	E4: Click here to enter a date.
(if yes) 27] Did verification events confirm VOC detection?				<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
28] Dates DEQ was notified (if applicable) of the exceedance(s) on lines 23, 24 or 25?	E1: Click here to enter a date.	E2: Click here to enter a date.	E3: Click here to enter a date.	E4: Click here to enter a date.
29] Will the facility pursue an ASD for any of the exceedances?				<input type="checkbox"/> Yes <input type="checkbox"/> No
30] Do the sampling results, as presented in this certified submission, indicate landfill leachate has entered into the collection system being sampled?				<input type="checkbox"/> Yes <input type="checkbox"/> No
(if yes) 30-a] Has the discharge of collected media changed due to sampling results?				<input type="checkbox"/> Yes <input type="checkbox"/> No
(if yes) 30-b] What facility actions are planned to address the exceedances?				
Attachments. The following attachments must be submitted in the order prescribed				
Attachment I: Site Identified on a USGS 7 1/2-minute Topographic Map				
Attachment II: Site Plan, 11" x 17"				
Attachment III: Table of constituents exceeding background levels				
Attachment IV: Complete Laboratory Analytical Reports (including Verification events)				
Attachment V: Chain of Custody documentation (including Verification events)				
Attachment VI: Field book documentation (including Verification events)				
Attachment VII: Statistical Data Sheets				
Responsible Official Signature:				
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision by qualified personnel who properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the submitted information, to the best of my knowledge and belief, the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.				
Name:		Title:		
Signature:			Date:	

Instructions for Completing the ALUMS Report

The Annual Landfill Underdrain Monitoring Summary (ALUMS) Report form was developed to provide a consistent annual report format that should enable an expeditious review of the submitted technical content by DEQ staff. To provide an annual report summarizing all sampling events during the calendar year, up to four date boxes are provided for questions 13, 16, 18, 21, 22, 26, and 28 to allow for reporting dates for up to four sampling events during the year, consistent with quarterly monitoring. If the underdrain system was only sampled once or twice during the calendar year, enter the appropriate dates in the E1 and E2 boxes and leave the remaining boxes (E3 and E4) blank.

The report should be filled out by the Owner/Operator, or their representative, and certified by a Responsible Official. Completed ALUMS Reports shall be addressed to the facility's Regional Office contact and received before December 31st of each calendar year. The descriptions below are listed in the order as they appear on the ALUMS Report.

General Facility Information

Line 1 DEQ Regional Office to which you submit monitoring reports. Select from drop-down: BRRO/L (Blue Ridge – Lynchburg), BRRO/R (Blue Ridge - Roanoke), NRO (Northern), PRO (Piedmont), SWRO (Southwest), TRO (Tidewater), and VRO (Valley).

Line 2 List the name of your DEQ Regional Office contact.

Line 3 Select date of the submittal.

Line 4 Permit number, SWP###.

Line 5 Identify the landfill name.

Line 6 Select the groundwater sampling program status, (i.e., Detection, Assessment, Modified Assessment, First Determination, or Phase II). This is a general indicator of whether there has been a landfill impact on the aquifer identified to date.

Line 7 Select the landfill operational status: active, closing, or post-closure.

Line 8a Identify the system being sampled (e.g., drain system, dewatering or gradient control system, witness zone, piped stream, seep/spring collection system, or other).

Line 8b Identify the type of media being sampled (i.e., perched water, groundwater, stormwater, surface water, mix of groundwater and surface water, or witness zone).

Line 8c Describe the underdrain discharge, indicating how and where (e.g., storm water basin, stormwater ditch, receiving stream, etc) the collected discharge is managed.

Line 9 Identify the underdrain sampling frequency.

Line 10 Yes or No.

Line 11 List total number of system monitoring points sampled.

Line 12 For piped stream collection systems, list total number of any upgradient monitoring points sampled. For groundwater collection systems, if applicable, list the number of upgradient monitoring wells sampled. Use 'NA' if not applicable.

Sampling Specifics

Line 13 List the date(s) the system was sampled. Boxes are provided for up to four sampling events for the calendar year. If the underdrain was only sampled semi-annually or annually, enter sampling dates within the calendar quarter the sample was taken.

Line 14 Yes or no. If the answer is yes, please fill out lines 'a' through 'c' with a yes or no as appropriate and check the initial occurrence box if applicable.

Line 15 Were any parameters measured directly in the field? Yes or No.

Analytical Lab Information

Line 16 Provide the dates the samples were sent to the analytical lab.

Line 17 Yes or no.

Line 18 Provide the dates the samples were received at the lab.

Line 19 Yes or no.

Line 20 Yes or no. Please note, SW-846 methods are only required for constituents that are listed on Table 3.1 of 9 VAC 20-81-250.E.

Line 21 Provide the dates the analytical reports were issued by the lab under the signature of the lab manager/director.

Line 22 Provide the dates the analytical report was received by the consultant/facility.

Interpretation and Response to Analytical Results

Line 23 Yes or no. Please note that for some system designs, it may be more appropriate for a facility to compare the point of sampling data against its own background level (similar in concept to intrawell analysis) if data from the upgradient groundwater monitoring well(s) is not considered truly representative of the media being collected in the underdrain system.

Line 24 Yes or no. Please note that for surface water, an entity which can be highly variable, background level, shall consist of upgradient samples (at least four independent samples) obtained the same day as the downgradient samples are obtained. Background level shall not consist of historical upstream sampling data.

Line 25 Yes or no.

Line 26 Yes or no.

Line 27 Yes or no.

Line 28 Provide dates of notification (if applicable).

Line 29 Yes or no.

Line 30 Yes or no. If yes complete Line 30a and Line 30b

Line 30a Indicate (yes or no) whether the discharge method as identified in 8c has changed due to sampling results indicating landfill leachate has entered the underdrain collection system.

Line 30b Identify planned facility actions to address the exceedance(s).

Attachments

Att-I Provide a USGS topographic map showing site location.
It is not appropriate to identify the site solely on a 3rd party electronic mapping database unless the software uses seamless digitized versions of USGS 7.5 minute topographic quadrangle maps.

Att-II Provide a site plan showing sampling location(s), scaled to fit a page no larger than 11" x 17".

Att-III Provide a simple table which lists each sampling point by 'ID' and its corresponding list of groundwater constituents found to exceed facility background (or VOC above LOQ).

Any constituents found to exceed for the initial time should be presented in **bold italics**.

Att-IV Attach a copy of the laboratory report, including the cover and signature pages, as well information concerning VELAP lab accreditation/certification.

Att-V Attach a copy of the Chain of Custody documentation related to the sampling event.

Att-VI Attach a copy of the field book documentation concerning sampling actions.

Att-VII Attach statistical analysis (if applicable).

Responsible Official Signature

The form must be signed by a responsible official. A responsible official is defined in the Virginia Solid Waste Management Regulations (9 VAC 20-81-10 *et seq.*) as:

- “1. For a business entity, such as a corporation, association, limited liability company, or cooperative: a duly authorized representative of such business entity if the representative is responsible for the overall operation of one or more operating facilities applying for or subject to a permit. The authority to sign documents must be assigned or delegated to such representative in accordance with procedures of the business entity;
2. For a partnership or sole proprietorship: a general partner or the proprietor, respectively; or
3. For a municipality, state, federal, or other public agency: a duly authorized representative of the locality if the representative is responsible for the overall operation of one or more operating facilities applying for or subject to a permit. The authority to sign documents must be assigned or delegated to such representative in accordance with procedures of the locality.”